Docket No.: 1454.1588

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Norbert KROTH et al.

Serial No. 10/519,923   Group Art Unit: 2617

Confirmation No. 7678

Filed: January 3, 2005   Examiner: Sharad K. Rampuria

For: METHOD FOR CONTROLLING DATA TRANSMISSION IN RADIO
        COMMUNICATION SYSTEM WITH HIERARCHICAL NETWORK ARCHITECTURE
        (as amended)

ARGUMENTS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants request review of the final rejection in the Office Action mailed November 10, 2009 which has a period for response set to expire on November 10, 2009. A Notice of Appeal and Petition for a two-month extension of time together with the requisite fees, are being filed with this Request. No amendments are being filed with this Request.

On pages 2-4 of the Office Action, the Examiner rejects independent claims 14 and 25 (and dependent claims 15-18, 21-24, and 26) under 35 U.S.C. §102(b) as being anticipated by Park et al. (U.S.P. 5,912,884 AI) ("Park"). On pages 5.6 of the Office Action, the Examiner rejects dependent claims 19-20 under 35 U.S.C. §103(a) as being unpatentable over Park in view of Budka et al. (U.S.P. 6,577,871) ("Budka").

This review is requested since the rejections of record are clearly not proper and Applicants submit this request is based on clear legal and factual deficiencies in the rejections and not strictly an interpretation of the claims or prior art teachings.

Independent claim 14 recites a method for controlling transmission of data in a radio communication system having a hierarchical network architecture including "administering physical resources for a data transmission to user equipment by a first device at a first hierarchy

within the hierarchical network architecture, the first device providing a physical radio connection interface to the user equipment; and <u>transmitting load information about a current load situation of the physical resources by the first device to a second device at second hierarchy higher than the first hierarchy within the hierarchical network architecture for controlling a load distribution</u>." (Emphasis added). Independent claim 25 has a similar recitation.

The Examiner asserts that Park teaches:

> "method for controlling an overload cell in a Mobile System comprises the steps of: a first step of receiving information on the overload cell from an overload detection module within a base station controller to retrieve the information on the load of neighboring cells and calculating the information on the total overload of neighboring cells; a second step of determining whether or not the total overload of the neighboring cell in a second hierarchy is greater than the maximum value of the neighboring cells; a third step of informing the overload detection module of the impossibility of control and terminating the procedure when it is determined that the total overload of the neighboring cell in the second hierarchy is not greater than the maximum value of the neighboring cells; a fourth step of retrieving a cell group as a third hierarchy with minimum load when at the second step it is determined that the total overload of the neighboring cell in the second hierarchy is greater than the maximum value of the neighboring cells." (Park, Col.2; 25-61, Col.3; 1-7). <u>Thus, it is evidently, the explanations above are directed to telecommunications systems and methods for a hierarchical structure of base stations which includes BSC transmits the load info to the BSM at a higher hierarchical state, which also includes multiple layers of BS</u>, that positively, anticipated by PARK.

(Emphasis added).

Applicants submit that the Examiner's statement and support for the rejection is in error. Rather, Park teaches:

> CMS is composed of a base station manager (referred to "BSM" hereinafter simply), a controller, a base transceiver subsystem, a mobile station, and mobile telephone switch office, etc,. One BSM controls 12 base station controllers and performs the operation and maintenance of the base station controller and the base transceiver subsystem. One base station controller has a cell control processor (hereinafter referred to "CCP" simply) and 32 selector interface module (hereinafter referred to "SIM" simply) and is in charge of the wire and wireless link control signals and the control of the calls.

(See, for example, col. 2, lines 25-36)

That is, Park merely discloses a CDMA Mobile System (CMS) is composed of a base station manager (BSM), a controller, a base station subsystem, etc., and that the BSM performs operation and maintenance of the base station controller (BSC) and the base transceiver subsystem (comprising BSs). Park does not teach any exchange of information between the base station controller (BSC) and the BSM relating to load information. Rather,

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Parks's description and figures merely teach a situation where the base station controller (BSC) controls the load of cells of base station subsystems assigned to it.

Furthermore, although Park discloses, in the passage cited by the Examiner, cells being assigned to different hierarchies, Applicants submit that one of ordinary skill in the art would understand that such hierarchy merely teaches a kind of virtual hierarchy. Park teaches (see, for example, Fig 2) a cell of the first hierarchy is cell T(0,0) with a current overload situation. Based on this cell, neighbouring cells T(1,0) to T(1,5) around this overloaded cell T(0,0) are assigned to a second hierarchy, and cells (T(2,0) to T(2,11)) of a further ring around the cells of the second hierarchy are assigned to a third hierarchy.

If, based on the teaching of Fig. 2, instead cell T(1,0) would be the overloaded cell (first hierarchy), than the configuration of the hierarchies of neighbouring cells would be completely different, i.e., cells T(2,0), T(2,1), T(1,1), T(0,0), T(1,5) and T(2,11) would be the ones assigned to the second hierarchy.

That is, the definitions of the hierarchies of cells therefore depend entirely on the definition of the overloaded cell. Accordingly, the hierarchies disclosed in Park only relate to cells and are variable over time.

Thus, Applicants submit that one of ordinary skil in the art, using teaching of Park, cannot derive any hierarchy within the base station subsystems. The base stations (BS) of such base station subsystem, the base stations of which form these cells, always have the same hierarchical position within the telecommunication network, i.e., below the hierarchy of the base station controller, while their cells may, for the purpose of controlling an overload, be assigned to different hierarchies over time. The hierarchies of base stations and cell should therefore not be confused.

Thus, Park does not teach a transmitting load information between base stations and base station controller, i.e., from a first device of a first hierarchy to a second device of a second hierarchy. Rather, Park merely discloses:

> CDMA Mobile System comprises the steps of: receiving information regarding the overload cell from an overload detection module within a base station controller to retrieve the information regarding the load of neighboring cells and calculate the information on the total overload of a neighboring cells; comparing whether the predetermined total overload of the neighboring cells with a total load of the neighboring cells; informing the overload detection module of the impossibility of control when it is determined that the total overload of the neighboring cells is not greater than the total load of the neighboring cells.

(See, for example, lines 50-55).

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That is, Park merely teaches the reception of information regarding the overload cell and retrieval of information regarding the load of neighboring cells at the base station controller. Park does not teach the source of origination of the information.

Thus, Applicants submit that one of ordinary skill in the art would understand that such information is present in the base station controller (as controlling instance of all cells taken into account) or provided by other base station controllers (as controlling instance of some of the neighboring cells), wherein such other base station controllers are of course assigned to the same hierarchical layer as the base station controller to which the overload cell is assigned to.

Further, Applicants submit that nothing in the teaching of Budka overcomes the deficiencies in the teaching of Park discussed above.

Since all of the features of independent claims 14 and 25 are not taught by the art of record, the rejections are in error and should be withdrawn.

Claims 15-24 depend from claim 14, and claim 26 depend from Claim 25. These dependent claims include all of the features of the respective claims upon which they depend, plus additional features which are not disclosed or suggested by the cited references.

For the above reasons, it is submitted that the Examiner's rejection of claims 14-26 is in error and claims 14-26 patentably distinguish over the art currently relied on by the Examiner. Thus, withdrawal of the final rejection is respectfully requested.
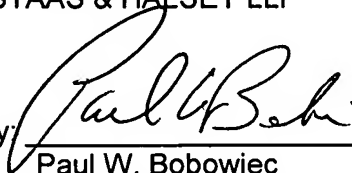
If there are any additional fees associated with filing of this Request, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: _Cpil 17, 2010_   By: _____
                                    Paul W. Bobowiec
                                    Registration No. 47,431

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501